CLAIMS

1. A system for integrating at least one residential Plain Old Telephone System (POTS) phone to a cellular phone network, comprising:

a Subscriber Line Interface Circuit (SLIC) (120) for interfacing audio from the cellular phone network to the at least one residential POTS phone;

a line switcher (122), connected to said SLIC, for connecting the at least one residential POTS phone to any one of a POTS line or a cellular line; and

an audio gateway (116), connected to said SLIC, for wirelessly receiving the audio from a cellular phone connected to the cellular phone network for subsequent transmission to the at least one residential phone and for wirelessly transmitting the audio from the POTS line to the cellular phone.

2. The system of claim 1, wherein said SLIC comprises a Dual Tone Multi Frequency (DTMF) decoder (122) for decoding a dialed number string initially input to the residential POTS phone, and for formatting the dialed number string for use by the cellular phone network.

3. The system of claim 2, wherein the cellular phone includes a modem, and said SLIC (120) formats the dialed number string into ATtention (AT) commands for use by the modem included in the cellular phone.

4. The system of claim 3, wherein the cellular phone includes a modem, and said audio gateway includes an AT command translator.

5. The system of claim 1, wherein the cellular phone includes a modem, and said audio gateway includes an ATtention command translator for receiving AT commands from said SLIC and translating the AT commands into a format compatible with the modem included in the cellular phone.

6. The system of claim 1, wherein said SLIC (120) comprises a caller ID module for receiving caller ID information from the cellular phone network and for outputting the caller ID information for use by the residential POTS phone.

7. The system of claim 1, wherein said SLIC (120) receives Pulse Code Modulation (PCM) signals from the cellular phone network for conversion to analog signals for subsequent receipt by the residential POTS phone, and receives the analog signals from the POTS line for conversion to the PCM signals for subsequent receipt by the cellular phone.

8. The system of claim 1, wherein the at least one residential POTS phone includes a remote residential POTS phone, and said system further comprises at least one remote extender (4420) for allowing communications between the remote residential POTS phone and any one of the POTS line and the cellular line.

9. The system of claim 1, wherein said audio gateway comprises an embedded cellular phone and docking station (4654), for allowing communications between the cellular phone and the embedded cellular phone.

10. The system of claim 1, wherein said SLIC (120) is connected to a Telephone Access Point (TAP).

11. The system of claim 1, wherein said audio gateway (116) is capable of communicating with the cellular phone via any one of a hard wired cable, an embedded BLUETOOTH module, an external BLUETOOTH dongle, and an InfraRed (IR) module.

12. The system of claim 1, wherein the cellular phone includes a modem, and said audio gateway issues ATtention (A) commands directed to the modem included in the cellular phone for enabling the cellular phone to receive a phone call dialed to a number of the residential POTS phone.

13. The system of claim 1, further comprising a USB interface (110) for connecting the cellular phone to said SLIC.

14. The system of claim 1, further comprising an RS-232/Analog Audio Interface (112) for connecting the cellular phone to said SLIC.

15. The system of claim 1, wherein the at least one residential POTS phone comprises at least one cordless phone.

16. The system of claim 15, wherein the at least residential POTS phone further comprises at least one corded phone.

17. The system of claim 1, wherein the audio gateway (116) is capable of sensing line voltages and Dual Tone Multi Frequency commands for determining call status, and providing an indication of the call status to the cellular phone using ATtention (AT) commands.